

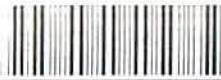
1/8/2008 1:20:00 PM  
Johnston

# Process Sheet

|   |                  |                              |
|---|------------------|------------------------------|
| CU-DAR001 Dart Helicopters Services               | Drawing Name     | : BRACKET ASSEMBLY           |
| 36663 <i>3</i>                                    | Part Number      | : D3121141                   |
| Estimate Number : 10278                           | Drawing Number   | : D3121 REV E                |
| P.O. Number :                                     | Project Number   | : N/A                        |
| This Issue : 1/8/2008 S.O. No. :                  | Drawing Revision | : E                          |
| First Rev. : NC                                   | Material         | :                            |
| First Issue : 1/1 Type : MACHINED PARTS           | Due Date         | : 2/15/2008                  |
| Previous Run : 36629                              | Qty:             | <i>15</i> Um: <i>281</i> Eac |
| Written By : <i>[Signature]</i>                   |                  |                              |
| Checked & Approved By : <i>[Signature]</i>        |                  |                              |
| Comment : Est Rev. No. A 04-02-18 New Issue KJ/DS |                  |                              |
| Est Rev. B EON 1060 07-11-12 DD verified by: EC   |                  |                              |

Additional Product

Job Number:



Seq. #:

Machine Or Operation:

Description :

10

M17-4-B1.000X02.000

17-4 SS Bar



Comment: Qty.: 0.5775 f(s)/Unit Total: 23.1000 f(s)  
Material: 17-4 SS Bar per AMS 5604/5643  
(M17-4-B1.000x02.000)  
Identify for D3121-111  
Batch: *A132476*

*S.F 08/02/09*

20

BAND SAW

BAND SAW



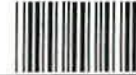
Comment: BAND SAW  
Cut blanks: (1.000" x 2.000") 6.600" long

*S.F 08/02/09*

30

HAAS1

HAAS CNC VERTICAL MACHINING #1



Comment: HAAS CNC VERTICAL MACHINING #1

1-Machine D3121-111 as per Folio FA361 and Dwg D3121 Identify as D3121-111  
2-Deburr  
3-Scribe batch number

*(110)*

*S.F 08/02/09*

40

QC2

INSPECT PARTS AS THEY COME OFF MACHINE



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

*S.F 08/02/09*

5/2008 1:20:00 PM

Boston

## Process Sheet

DU-DAR001 Dart Helicopters Services

Drawing Name: BRACKET ASSEMBLY

Order: 36663

Part Number: D3121141



Seq. #: Machine Or Operation: Description:

5.0

QC8

SECOND CHECK



Comment: SECOND CHECK

J.L. 08/02/20

6.0

D312121

Bolt



Comment: Qty.: 1.0000 Each(s)/Unit Total: 40.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D3121-21

Bolt

~~3468~~ B36068 (16), B37478 (9)~~2 F 08/02/20 (13)~~

7.0

D3121241

Bearing Assembly



Comment: Qty.: 1.0000 Each(s)/Unit Total: 40.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D3121-241 Bearing Ass

~~10 36670~~ B37475 (15)

B37475

~~2 F 08/02/20 (13)~~

8.0

SMALL FAB 1

SMALL &amp; MEDIUM FAB RESOURCE 1

Comment: SMALL & MEDIUM FAB RESOURCE 1  
Assemble D3121-141 as per Dwg D3121.

MK

08-02-22 (15)

~~2 F 08/02/20 (13)~~

9.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

Joe 2/25 (15)

Joe 2/24 (13)

10.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location:

5/2/23 (15)

5/2/21 (13)

5/2/25 (15)

5/2/25 (15)

11.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

1008/02/20 (13)

~~1008/02/20~~

Job Completion



m 2008/2/25 (15)

~~1008/02/20~~

|                       |         |              |           |
|-----------------------|---------|--------------|-----------|
| ART AEROSPACE LTD     |         | Work Order:  | 36663     |
| Description: Bracket  |         | Part Number: | D3121-111 |
| Inspection Dwg: D3121 | Rev: DE | Page 1 of 1  |           |

### FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

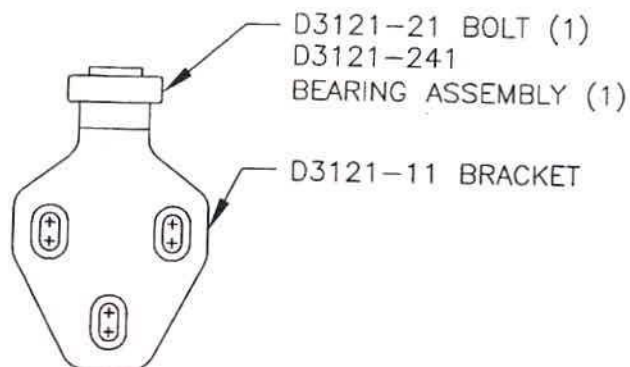
| Drawing Dimension | Tolerance     | Actual Dimension | Accept | Reject | Method of Inspection | Comments |
|-------------------|---------------|------------------|--------|--------|----------------------|----------|
| Ø0.392            | +0.002/-0.000 | .392             | ✓      |        |                      |          |
| 0.75              | +/-0.030      | .751             | ✓      |        |                      |          |
| 0.375             | +/-0.010      | .376             | ✓      |        |                      |          |
| 2.14              | +/-0.030      | 2.140            | ✓      |        |                      |          |
| 0.950             | +/-0.010      | .952             | ✓      |        |                      |          |
| 0.600             | +/-0.010      | .609             | ✓      |        |                      |          |
| 1.96              | +/-0.030      | 1.962            | ✓      |        |                      |          |
| 0.280             | +/-0.010      | 0.287            | ✓      |        |                      |          |
| 3.330             | +/-0.010      | 3.330            | ✓      |        |                      |          |
| 3.630             | +/-0.010      | 3.625            | ✓      |        |                      |          |
| R0.25             | +/-0.030      | R.250            | ✓      |        |                      |          |
| R0.375            | +/-0.010      | R.375            | ✓      |        |                      |          |
| Ø0.201            | +0.005/-0.000 | .204             | ✓      |        |                      |          |
| 0.100             | +/-0.010      | .1000            | ✓      |        |                      |          |
| 4.582             | +/-0.010      | 4.575            | ✓      |        |                      |          |
| 6.18              | +/-0.030      | 6.183            | ✓      |        |                      |          |
| 5.89              | +/-0.030      | 5.895            | ✓      |        |                      |          |
| 0.080             | +/-0.010      | .078             | ✓      |        |                      |          |
| 0.300             | +/-0.010      | .301             | ✓      |        |                      |          |
| 30°               | +/-0.1°       | 30°              | ✓      |        |                      |          |
| R0.25             | +/-0.030      | R.250            | ✓      |        |                      |          |
| 0.130             | +/-0.010      | .128             | ✓      |        |                      |          |
| 0.381             | +/-0.010      | .389             | ✓      |        |                      |          |
| 0.281 0.201       | +/-0.010      | .204             | ✓      |        |                      |          |
| 0.400             | +/-0.010      | .404             | ✓      |        |                      |          |
| 0.580             | +/-0.010      | .580             | ✓      |        |                      |          |
| 100°              | +/-1°         | 100°             | ✓      |        |                      |          |
| 0.032             | +0.002/-0.010 | .031             | ✓      |        |                      |          |

|                        |                       |                     |     |
|------------------------|-----------------------|---------------------|-----|
| Measured by: <i>DE</i> | Audited by: <i>DE</i> | Prototype Approval: | N/A |
| Date: 08/02/09         | Date: 08/02/12        | Date:               | N/A |

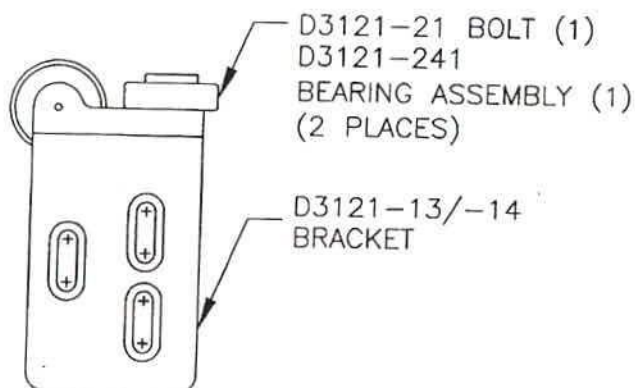
| Rev | Date     | Change  | Revised by | Approved |
|-----|----------|---|------------|----------|
| A   | 04.01.12 | New Issue P/O D3121-141                         | KJ/RF      |          |
| B   | 04.05.05 | Dimensions changed/re-arranged per Dwg revision | KJ/JLM     |          |
| C   | 06.06.14 | Dwg Rev. updated                                | KJ/JLM     |          |

**DART****RELEASED**  
07.11.07

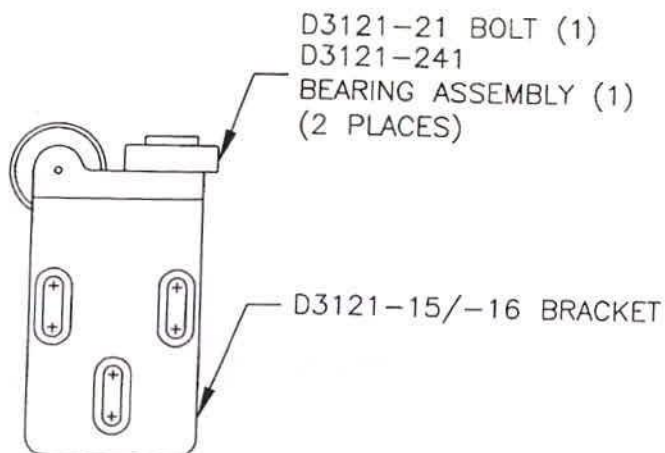
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| CHECKED<br>#     | APPROVED<br>#  | DRAWING NO.<br>D3121   | REV<br>SHEET 1 OF |
| DATE<br>07.11.07 |                | TITLE<br>BRACKET ASSEMBLY  |                   |
| A                | 02.04.15       | NEW ISSUE  |                   |
| B                | 03.01.16       | ADD RIDGES; ADD MAT'L PROP; FIX P/<br>ADD -141/-143/-144/-145/-146 |                   |
| C                | 04.02.17       | ADD CLEARANCE; USE -241 BEARING                                    |                   |
| D                | 06.05.17       | D3121-25 CAP WAS 1.024, NOW 1.000                                  |                   |
| E                | 07.11.07       | ADD TOLERANCE TO 0.032 (DETAIL B)                                  |                   |



**D3121-041 BRACKET ASSEMBLY**  
(REPLACES PREMIER P/N B30-23000-33)



**D3121-043 (SHOWN) / D3121-044 (OPPOSITE) BRACKET ASSEMBLY**  
(REPLACES PREMIER P/N B30-23000-37/-38)



**D3121-045 (SHOWN) / D3121-046 (OPPOSITE) BRACKET ASSEMBLY**  
(REPLACES PREMIER P/N B30-23000-35/-36)

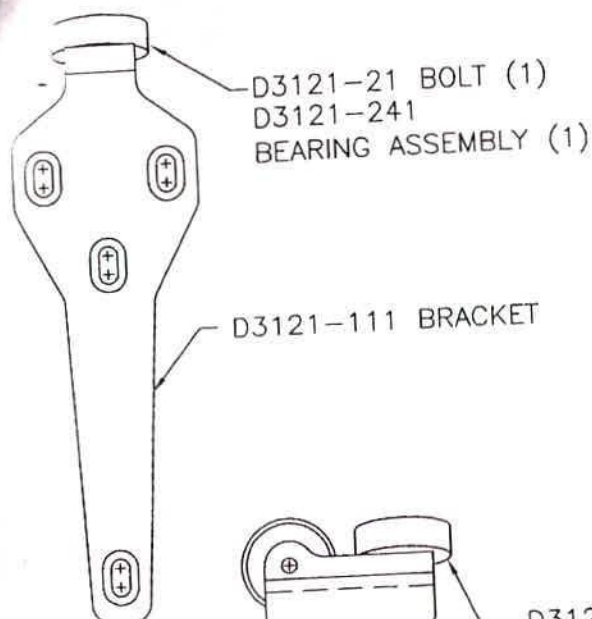
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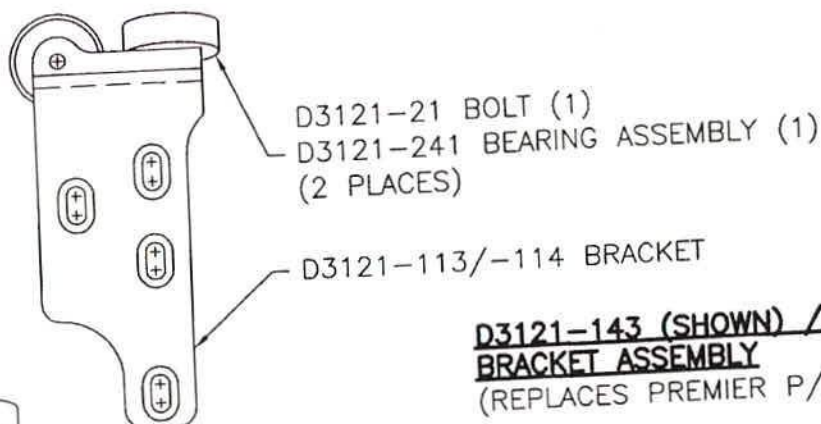
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| CHECKED<br>#     | APPROVED<br>#  | DRAWING NO.<br>D3121                              | REV. E<br>SHEET 2 OF 10 |
| DATE<br>07.11.07 |                | TITLE<br>BRACKET ASSEMBLY                         | SCALE<br>1:2            |

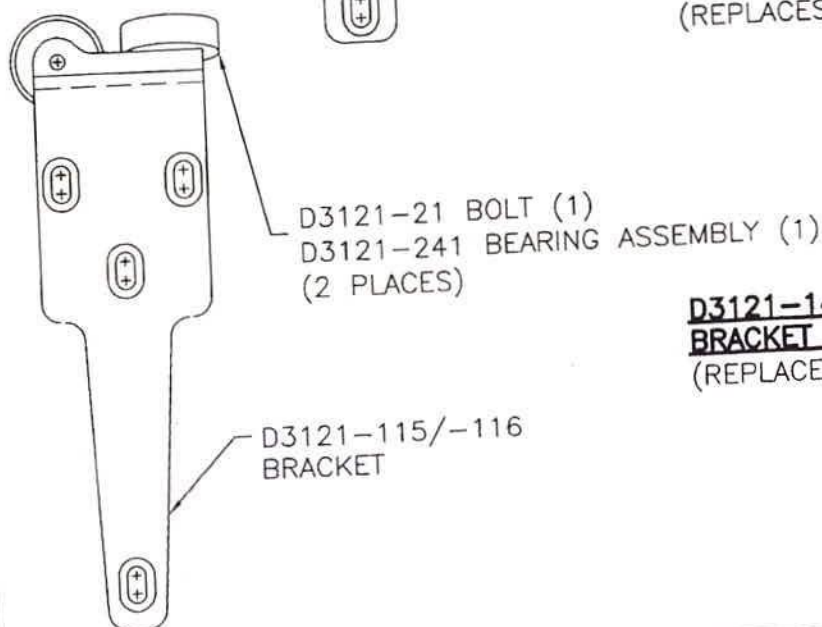


**D3121-141 BRACKET ASSEMBLY**  
(REPLACES PREMIER P/N B30-23001-01)

**RELEASED**  
07.11.07



**D3121-143 (SHOWN) / D3121-144 (OPPOSITE)**  
**BRACKET ASSEMBLY**  
(REPLACES PREMIER P/N B30-23000-03/-04)



**D3121-145 (SHOWN) / D3121-146 (OPPOSITE)**  
**BRACKET ASSEMBLY**  
(REPLACES PREMIER P/N B30-23000-05/-06)

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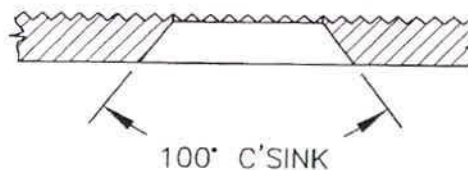
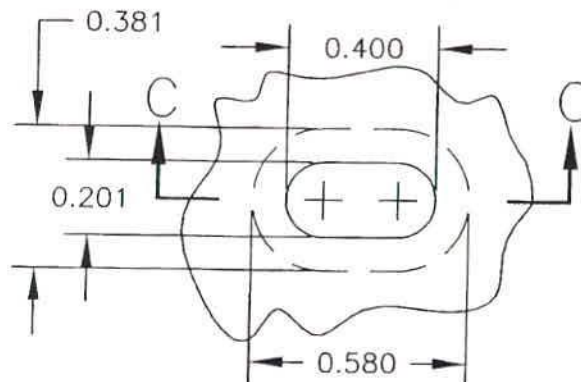
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| DATE<br>07.11.07 |                | TITLE<br>BRACKET ASSEMBLY                         |                |

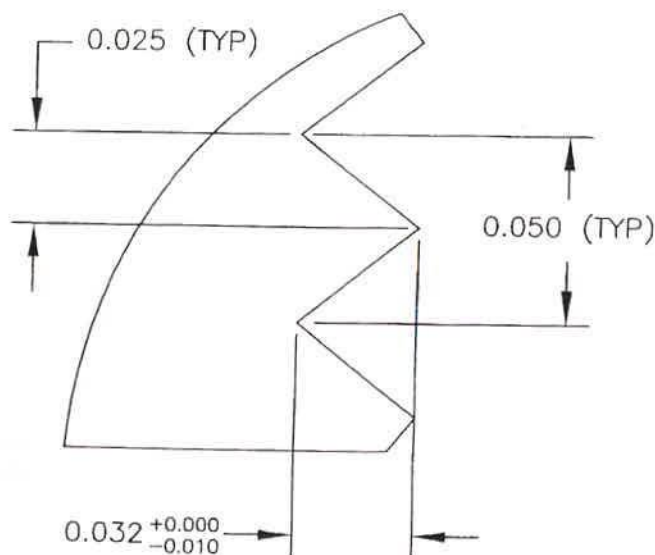
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**SLOT DETAIL**  
SCALE 2:1  
VIEW ROTATED



**SECTION**  
**C-C**

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07.11.07

**DETAIL B:**  
**RIDGE DETAIL**  
PARTIAL SECTION  
SCALE 1:20



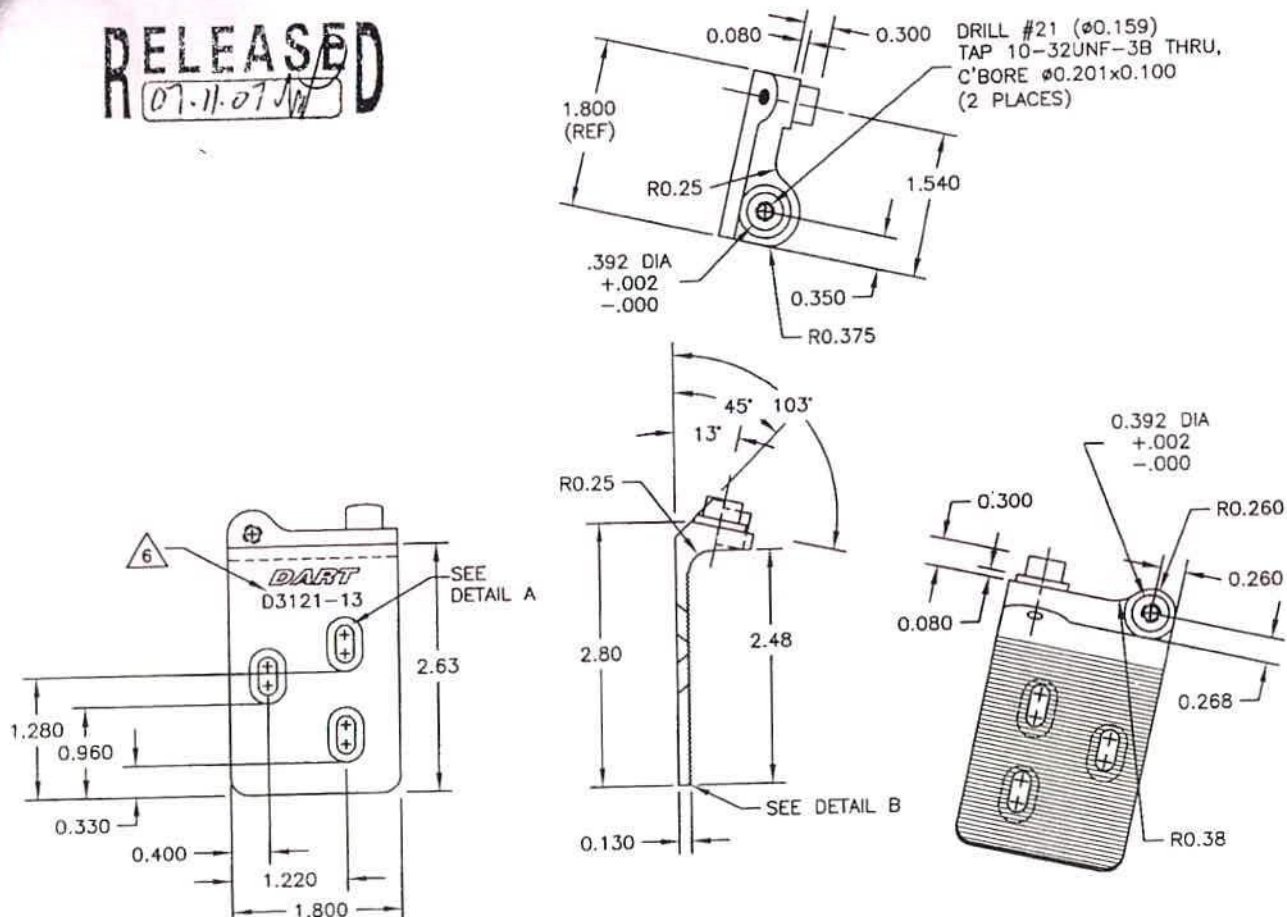
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| CHECKED<br>#     | APPROVED<br>#             | DRAWING NO.<br>D3121                              | REV. E<br>SHEET 5 OF 10 |
| DATE<br>07.11.07 | TITLE<br>BRACKET ASSEMBLY |   | SCALE<br>1:2            |

**RELEASED**  
07.11.07

**D3121-13 BRACKET (SHOWN)**  
**D3121-14 BRACKET (OPPOSITE)**

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)  
MIN ULTIMATE TENSILE STRENGTH = 150 ksi  
MIN YIELD TENSILE STRENGTH = 100 ksi
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N & LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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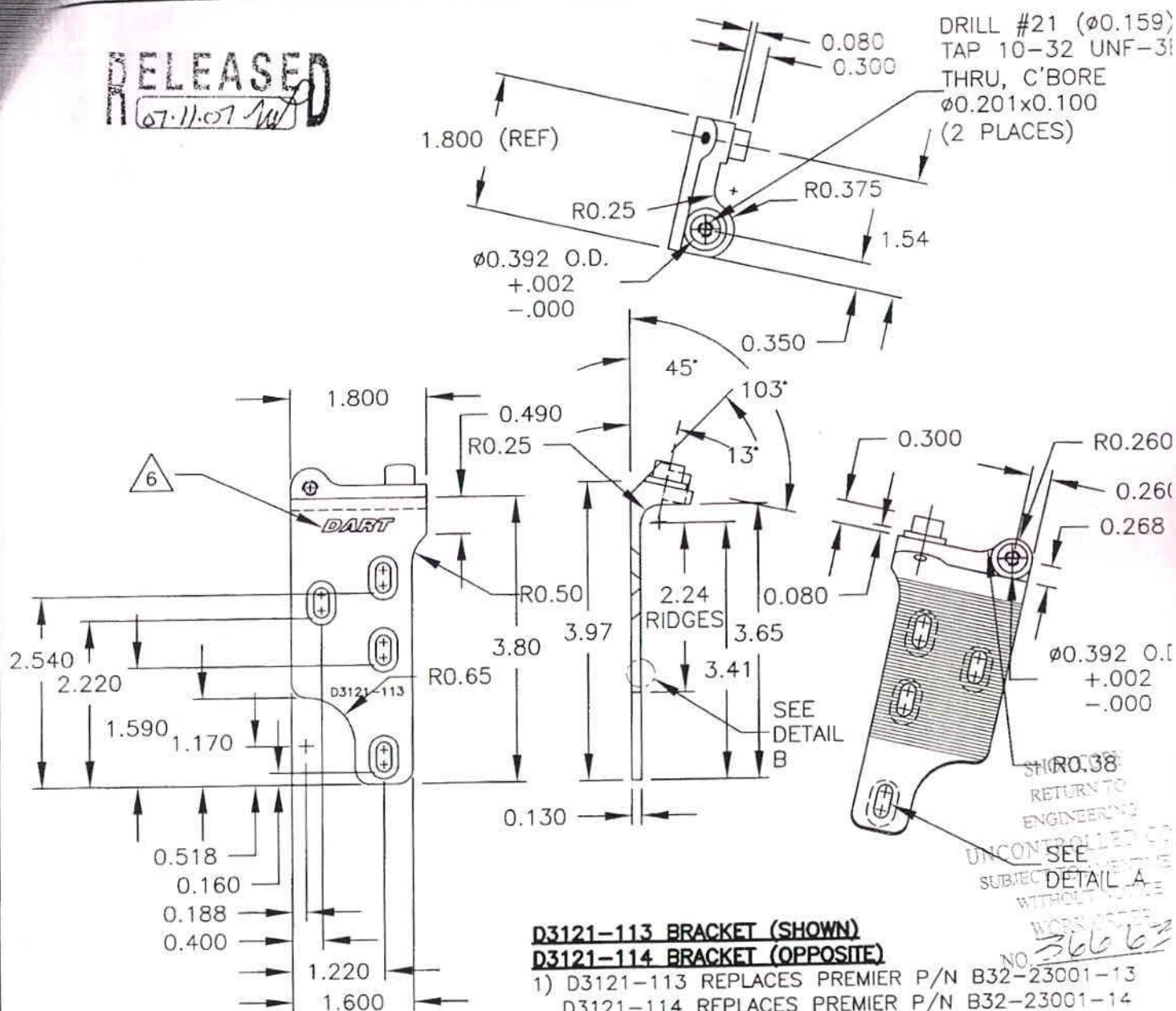
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| CHECKED<br>#     | APPROVED<br>#  | DRAWING NO.<br>D3121                              | REV. #<br>SHEET 8 OF 10 |
| DATE<br>07.11.07 |                | TITLE<br>BRACKET ASSEMBLY                         | SCALE<br>1:1            |

RELEASED  
07.11.07



**D3121-113 BRACKET (SHOWN)**  
**D3121-114 BRACKET (OPPOSITE)**

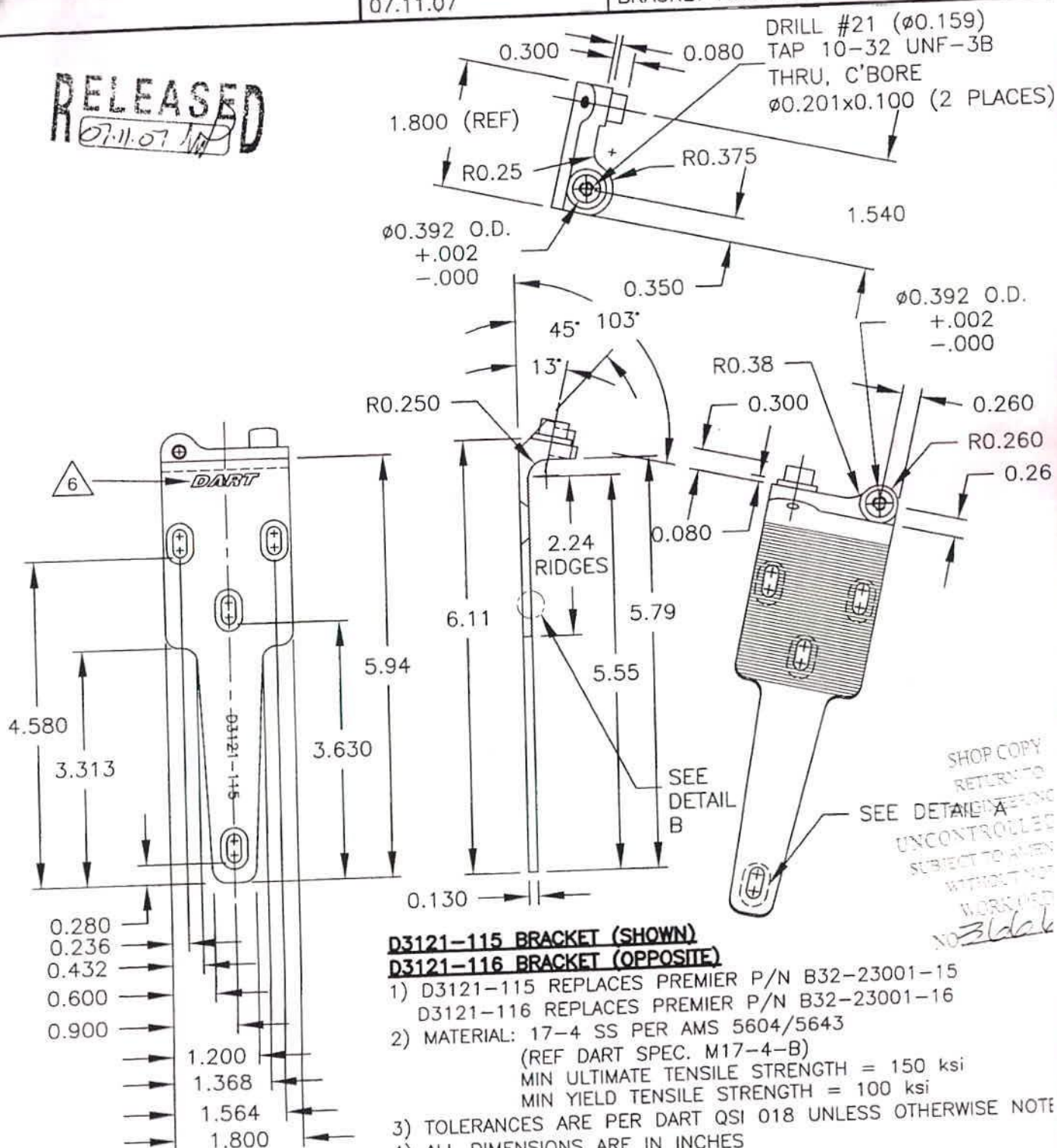
- 1) D3121-113 REPLACES PREMIER P/N B32-23001-13  
D3121-114 REPLACES PREMIER P/N B32-23001-14
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643  
(REF DART SPEC. M17-4-B)  
MIN ULTIMATE TENSILE STRENGTH = 150 ksi  
MIN YIELD TENSILE STRENGTH = 100 ksi
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 6) ENGRAVE DART P/N & LOGO IN AREAS SHOWN
- 7) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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| CHECKED          | APPROVED | DRAWING NO.<br>D3121                              | REV. E<br>SHEET 9 OF 10 |
| DATE<br>07.11.07 |          | TITLE<br>BRACKET ASSEMBLY                         | SCALE<br>1:2            |



**D3121-115 BRACKET (SHOWN)**  
**D3121-116 BRACKET (OPPOSITE)**

- 1) D3121-115 REPLACES PREMIER P/N B32-23001-15  
D3121-116 REPLACES PREMIER P/N B32-23001-16
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643  
(REF DART SPEC. M17-4-B)  
MIN ULTIMATE TENSILE STRENGTH = 150 ksi  
MIN YIELD TENSILE STRENGTH = 100 ksi
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTE
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 6) ENGRAVE DART P/N & LOGO IN AREAS SHOWN
- 7) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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